Claims

1. A traffic information calculation device, comprising:

vehicle information acquisition means that acquires vehicle information including a position of a vehicle, and a time at the position of the vehicle; branch determination means that determines, from a position of an intersection on a map database and the vehicle information, a branch direction of the vehicle at the intersection; and intersection traffic information calculation means that calculates, from the vehicle information, a waiting time or a jam length at the intersection for each of the branch directions.

2. The traffic information calculation device according to claim 1, characterized in that

the intersection traffic information calculation means calculates the waiting time or the jam length at the intersection for each of the branch directions using a driving speed of the vehicle derived from the vehicle information.

3. The traffic information calculation device according to claim 2, characterized in that

the driving speed of the vehicle is derived based on at least either a vehicle speed pulse signal or positioning satellite information.

4. A traffic information calculation method,

acquiring vehicle information including a position of

a vehicle and a time at the position of the vehicle, determining, from a position of an intersection on a map database and the vehicle information, a branch direction of the vehicle at the intersection, and calculating, from the vehicle information, a waiting time or a jam length at the intersection for each of the branch directions.

5.   A traffic information display method in which an intersection is displayed on a map, and in accordance with the intersection on the map, a waiting time or a jam length at the intersection is displayed for every branch direction.

6.   A traffic information display device, comprising:

cartographic information storage means that stores cartographic information including an intersection, and display means that displays, in accordance with the intersection on a map stored in the cartographic information storage means, a waiting time or a jam length at the intersection for every branch direction.